FACT SHEET

A selection of internet-based information

Butylone (bk-MBDB)
Nathalie Deprez, MSc.
The aim of this fact sheet is to inform professionals working in the drugs field about the characteristics of an illegal substance. It is a service to laboratories, hospitals and other partners who collaborate in the Belgian Early Warning System. The fact sheet is a selection of information available on the internet, using sources that we perceive as being reliable. Corrections and suggestions for internet sources are welcome.
A. General information

Recent seizure in Belgium (information provided by NICC)

A total of 49 blue tablets with ‘TP’-logo

13 dark blue tablets; thickness: 3.0 mm
8 blue tablets; thickness: 3.1 mm
28 bright blue tablets; thickness: 4.2 mm

All these blue tablets (49 in total, in divers shades of blue and with three thicknesses, namely 3.0; 3.1 and 4.2 mm) with TP-logo contain **2C-B** and **Butylone**.

2C-B = 4-bromo-2,5-dimethoxyphenethylamine (also called NEXUS).

**Butylone** = **bk-MBDB** = β-keto-**N**-methyl-3,4-benzodioxylbutanamine = 2-methylamino-1-(3,4-methyleendioxyphenyl)butan-1-one.


bk-MBDB (butylone) would have similar, hallucinogen effects as bk-MDMA (= methylone).
From EMCDDA: reporting profile

**Substance: bk-MBDB**

**Created**  
February 2008

**Updated**  
November 2009

**Type**  
Psychotropic substances

**Group**  
Cathinones (f.e. pyrrolidine derivates)

**Name**  
bk-MBDB

**Nature of substance**  
This substance is a ring-substituted derivative of cathinone and is closely related to ethylone (a structural isomer reported in New Zealand), to methylone and to MBDB.

**Systematic chemical name**  
2-methylamino-1-(3,4-methylenedioxyphenyl)butan-1-one

**Other names**  
Butylone, B1

**Alerts**  
No alerts

**Reports to EMCDDA**

**Sweden (EWS Report):** In its EWS Report for the 1st half of 2009 the NFP reported 3 seizures of powder, 0,74g; 17 seizures of powder, 1901,7g.

**Netherlands (EWS Report):** In its EWS Report for the 1st half of 2009 the NFP reported 1 seizure of tablets in combination with 2C-B (from NFI).

**Finland (EWS Report):** In its EWS Report for the 1st half of 2009 the NFP reported 3 seizures of 3g powder.

**Denmark (Reporting Form):** In January 2009 the NFP reported 3 seizures:  
- 19 November 2008: red capsules (broken) with 0,71 g powder at Holbæk  
- 5 December: 1,1 g white/beige powder at Copenhagen  
- 23 December: 10,4 g powder at Copenhagen.

**Sweden (EWS Report):** In its 2008 EWS Final Report the NFP reported 2 seizures of powder/13,1g.
Czech Republic (Reporting Form): In March 2008 the NFP reported 1 seizure of 1 white tablet with 'Dove' logo seized at Prague. It can be either bk-MDBB or bk-MDEA. The NFP informed that "there is no way without appropriate standards and by our equipment how to discriminate between the two upper described substances".

United Kingdom (Reporting Form): In January 2008 the NFP reported 2 collected samples of tablets purchased from a UK website. Type 1 tablets described as “Summer Daze Plant Growth Inhibitor”, Type 2 tablets described as “London Underground Doves Plant Feeder”. Both listed as “not for human consumption”. Extraction of a Type 2 tablet yielded 130mg pale yellow oil (base) equivalent to ~150mg of bk-MDBB hydrochloride.

Chemistry

Chemical Abstracts Service (CAS) registry number
17762-90-2

Molecular information
Molecular structure:

![Molecular structure of bk-MDBB](bk-MDBB.png)

Identification and analytical profile
- bkMDMA, bkMDEA, and bkMBDB.pdf
- bkMBDB.pdf

Physical description
UK collected samples, January 2008
Zaitsu, K., Katagi, M., et al., "Determination of the metabolites of the new designer drugs bk-MBDB and bk-MDEA in human urine" *FORENSIC SCIENCE INTERNATIONAL* VOL 188; NUMBER 1-3 Page(s): 131-139, 2009


DE1242241B1_butylon-analg.pdf

United Kingdom "Petent Specification", 1965

GB1085135A_butylon-analog.pdf
Butylone

### Systematic (IUPAC) name

1-(1,3-benzodioxol-5-yl)-2-(methylamino)butan-1-one

### Identifiers

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<tr>
<th>Identifier</th>
<th>Value</th>
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<td>CAS number</td>
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<tr>
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<tr>
<td>PubChem</td>
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### Chemical data

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<tbody>
<tr>
<td>Formula</td>
<td>C_{12}H_{15}NO_{3}</td>
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<tr>
<td>Mol. mass</td>
<td>221.2524 g/mol</td>
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<td>SMILES</td>
<td>eMolecules &amp; PubChem</td>
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### Pharmacokinetic data

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<tr>
<td>Metabolism</td>
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<tr>
<td>Half life</td>
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**Butylone**, also known as β-keto-N-methyl-3,4-benzodioxolylbutanamine (bk-MDBB), is a psychoactive drug and research chemical of the phenethylamine chemical class that acts as an entactogen, psychedelic, and stimulant. It is the β-keto analogue of methylbenzodioxylbutanamine (MBDB).

Butylone was first synthesized by Koeppe, Ludwig and Zeile which is mentioned in their 1967 paper. It remained an obscure product of academia until 2005 when it was synthesized by a chemical supply company, and has since continued to be sold as a designer drug.\(^1\) It has since been explored as a possible entheogen. Butylone shares the same relationship to MBDB as methylone does to methylenedioxymethamphetamine (MDMA; “Ecstasy”). The dosage range is not fully understood but seems to be lower than for MBDB. Formal research on this chemical was first conducted in 2009, when it was shown to be metabolised in a similar manner to related drugs like methylone.\(^2\)

**See also**

- Buphedrone
- Ethylone
- MDPBP
- Methylone

**References**

B. Legal status

In Belgium
Butylone is not controlled in Belgium.

From EMCDDA

Denmark: controlled
On the recommendation of The National Board of Health, the Danish Minister for Health and Prevention decided to add bk-MBDB to the Danish lists of controlled substances (List B). On 10 March 2009, the Minister signed an Executive Order amending the Executive Order on Euphoriant Substances which entered into force on 13 March 2009.
C. Experiences of users

A Decent Empathogen
bk-MBDB
by Phoenix

<table>
<thead>
<tr>
<th>DOSE: T+ 0:00</th>
<th>250 mg oral bk-MBDB (capsule)</th>
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<tbody>
<tr>
<td>T+ 1:17</td>
<td>50 mg oral bk-MBDB (powder / crystals)</td>
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</table>

The spacemonkey have some but limited experience of MDMA and Methylone. A slight hangover since yesterday night involving a couple of beers and drinks made me irresolute to do this trial but I went on anyway. Had b-vitamin complex in the morning and 360 mg Magnesium after dinner. Home alone in the sofa.

21:08
Swallowed a gel-capsule with 150mg butylone/bk-mbdb.

21:34
Lighter stimulating effects.

21:50
Mild empathogenic effects, mind is clear and my body begins to feel warm, slight restlessness.

22:25
The effects developed to a mild plateau from 22:00. This is ok, but I intended to get higher this night. I can imagine that it would be beautiful to add MJ on top of this, but I chose to supplement with 50 mg nasally since I'm having a break from MJ. I tried to listen to Eat Static - Implant/De-classified which I usually consider as brilliant trance but was not in the mood, Zap Mama - Ancestry in progress gave more room for introspection, and so did reggae.

22:57
Ah, this is what I intended tonight. It is very pleasant, euphoric, this material has therapeutic potential, but it is not very tactile. Some jaw tension. Music sounds beautiful and introspection is honest and forgiving. Did some N20 but the synergy was less than with LSD.

23:26
Peak is over, still pleasant.

00:23
I feel uncomfortable speedy and wasted. Hydrating. Still pleasant in some way, but I understand why some might experience crashing at this point.
1:17 Start to get really hungry.

Went to bed at 5, slept bad, had brain-movies instead of dreams and went up at 9. I still feel the body buzz and pupils are slightly dilated, I didn't expected after effects to be that long lasting. I need sleeping pills/downers for this one. Felt somewhat unfocused during the day, but no hangover.

This material has a quite strong push, which is neutral rather than positive in its nature. I question if one can have real transcendent experiences on bk-MBDB, but I still think it behaved as expected except for the long tail. I will consume what I have left but not buy any more. I expect it to be excellent in social settings.

Personally, I always enjoy to get wasted but I also think it gave me valuable time to summarize my life and identify behavioural patterns which causes unnecessary stress and life force degeneration. Quite subtle things actually, and not any major insights.

Exp Year: 2009  ID: 77700
Gender: Male
Added: Sep 21, 2009  Views: 1409
D. References


http://www.erowid.org/cgi-bin/search/htsearch.php?config=htdig&words=butylone&method=and